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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Scott B. Blum

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

LEVITAN, DMITRY

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/671,767

Applicant(s)

BLUM, SCOTT B.

Examiner

Dmitry Levitan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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Amendment, filed 06/25/04, has been entered. Claims 1-18 remain pending.

Specification

In light of the Applicant's corrections, the objection to the specification has been withdrawn.

Claim Rejections - 35 USC § 102

1. Claims 1, 7 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Leung (US 6,636,498).

Leung teaches a method, machine-readable medium (computer readable code 16:45-52) and apparatus of a mobile router (Fig. 1) comprising:

A first network interface card (inherently part of the element 8 on Fig. 1A, because interface cards are essential for elements 8 and 10 interfacing networks 17:16-17) that couples to a first network (network segment 12 on Fig. 1A and 1:55-63) and a second network interface card (foreign agent /element 10 on Fig. 1A and 2:1-7) to couple to a second network (network segment 14 on Fig. 1A),

A system controller (CPU 1004 on Fig. 10 and 17:1) that is coupled to a processor (processor 1010 on Fig. 10 and 17:1-15) and coupled to an Input/Output controller hub (controller 1028 on Fig. 10) that further couples to the first and second network interface cards (interfaces 1006 and 1008 on Fig. 1A),

A memory subsystem (memory 1012 on Fig. 1A and 17:12), having instructions for a network protocol independent bridge device driver (bridge implementation 17:61-62, inherently with bridge device driver, because the bridge interfaces networks, as shown on Fig. 1A), which when executed by the processor, causes the system to bridge the first network and second network

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(CPU and memory operations, as disclosed on 17:3-15 to route packets between networks on Fig. 1A) by:

Interfacing the bridge device with a first and a second network interface card driver (inherently part of the system, because interface card drivers are essential for network interfaces),

Adaptively deriving topology of the first and second network from network packets received from the first and the second networks (registration process, updating a table to specify the location of the mobile node as in 2:12-20).

Delivering the received network packets based on information contained in the received network packets and the derived topology (forwarding the packets to the correct agent, based on the packets address 2:33-46).

Claim Rejections - 35 USC § 103

2. Claims 2, 6, 8, 12, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of Machin (US 6,243,753).

Leung substantially teaches the limitations of claims 2, 6, 8, 12, 14 and 18.

Leung does not teach using standard driver/ Network Driver Interface Specification (NDIS).

Machin teaches using Network Driver Interface Specification (NDIS on 4:35-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using Network Driver Interface Specification (NDIS) of Machin to the system of Leung to incorporate standard driver, reducing the development complexity of the system.

3. Claims 3, 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of Machin in further view of Shannon (US 6,233,618).

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Leung substantially teaches the limitations of claims 3, 9 and 15, including translating instructions from the protocol driver to effectuate transparency of the bridge device driver (forwarding packets directly from Home Agent to a Foreign agent 2:21-30).

Leung does not teach utilizing application program interfaces.

Shannon teaches utilizing application program interfaces (screening packets for information with Application Programming Interface 13:35-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add utilizing application program interfaces of Shannon to the system of Leung to incorporate an effective screening tool to the system of Leung.

4. Claims 4, 5, 10, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of Machin in further view of Hoare (US 4,627,052).

5. Regarding claims 4, 10 and 16, Leung teaches all the limitations of parent claims 1,7 and 13.

Leung does not teach generating and modifying entries of unmatched source addresses and associated network information of the received network packets in a distributed table.

Hoare teaches generating and modifying entries of unmatched source addresses and associated network information of the received network packets in a distributed table (entering the unmatched packets into a table 1:65-67 and 2:1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add generating and modifying entries of unmatched source addresses and associated network information of the received network packets in a distributed table of Hoare to the system of

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Leung to incorporate an effective learning process to build an independent table to the system of Leung.

6. Regarding claims 5, 11 and 17, modified Leung teaches all the limitations of parent claims 4, 10 and 16.

Leung does not teach address filtering of the packets and delivering the packets according to their destination addresses, packet types and information in the distribution table.

Hoare teaches address filtering of the packets and delivering the packets according to their destination addresses, packet types and information in the distribution table (address filtering and forwarding the packets to the destination addresses after matching with a table 2:1-4 and 1:36-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add address filtering of the packets and delivering the packets according to their destination addresses, packet types and information in the distribution table of Hoare to the system of Leung to improve efficiency of the system by reducing the packets transmitted in each network (1:40-44).

Response to Arguments

7. Applicant's arguments filed 06/25/04 have been fully considered but they are not persuasive.

8. On page 9 of the Response, Applicant argues that Leung does not teach a bridge device utilizing protocol independent device driver.

Examiner respectfully disagrees.

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Leung teaches a bridge comprising interface cards 1008 and 1006 with multiple protocol interfaces (FDDI, Ethernet etc.) on Fig. 10 and 17:16-30, effectively utilizing protocol independent driver for the bridge.

9. On pages 9-10 of the Response, Applicant argues that Leung teaches only IP addresses in his system.

Examiner respectfully disagrees.

Leung teaches using “care-off” addresses as a general address for the mobile node, which may be for example an IP address (2:35-42). However, use of MAC address, disclosed in the Application, was never directly claimed, so “source address” of claims 4,5 10, 11, 16 and 17 comprises IP address of Leung.

10. On page 10 of the Response, Applicant argues that Leung does teach a system compatible with IPX and Netbeui.

Examiner respectfully disagrees.

Examiner believes that the argued compatibility is irrelevant, as IPX and Netbeui were never directly claimed.

Examiner therefore believes that the cited references meet all the claims limitations and the rejection is proper.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan
Patent Examiner
01/27/05.



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600